

BOOK REVIEW

CASSIN, JOHN. 1991. *Illustrations of the Birds of California, Texas, Oregon, British and Russian America*. Facsimile of 1856 Edition. Texas State Historical Association, Austin. Hardbound \$26.95 Introduction 42 pp + 298 pp.

A book in hand is worth fifty birds in the bush! As a naturalist you will not want to miss *Illustrations of the Birds*, a beautiful facsimile of the 1856 classic by John Cassin, "sometime the Nestor of America ornithology" (Coues). Yes, it is an overlooked botanical book. The fifty color plates often include plants as backgrounds featured in what Cassin designed as a supplement to Audubon's *Birds of America* with its plant backgrounds. This is a book for the historically prying reader. Published originally in the tracks of Pacific Railroad Surveys that crossed Texas and Mexican Boundary Survey, naturalists of the United States Army Corp., and other Smithsonian collectors encouraged by Baird—all fill the thickety text. Col. George A. McColl wrote,

On one occasion when approaching Limpia Creek (W. Texas), with a small party, on my way to El Paso, I discovered a fine male *Paisano* in the open road, about one hundred yards in advance. For amusement, I put spurs on my horse and dashed after him, followed by one of my men. For full four hundred yards, I ran him along a road level and smooth as a floor; and over which, with straightened neck and slightly expanded wings, he swiftly glided, seeming scarcely to touch the ground.

You will name the bird! There are ten other quotations from McColl's journal.

John Cassin, born 6 September 1813, in Media, outside Philadelphia, was a pupil in Westtown, the Quaker boarding school, a nursery of naturalists—Thomas Say, J.K. Townsend, and E.D. Cope were there. Cassin became manager of a leading engraving firm and a city council member, but from the age of nineteen he had examined 385 plants described in William Darlington's *Florula Cestrica*, natural history energized his life. Two brothers, a wealthy Philadelphia businessman, Edward, and Thomas B. Wilson, MD., cast Cassin's fate. In his informative, documented introduction, Robert M. Peck of the Academy writes, "Cassin, who dispensed bird names like military honors in his own publications, was himself so honored more than any other American ornithologist." The role of arsenic poisoning from handling hundreds of treated bird skins is a little-noted topic. Peck concludes that "Cassin's long exposure to arsenic poisoning from handling hundreds of treated bird skins is a little-noted topic. Peck concludes that "Cassin's long exposure to arsenic almost certainly played a part in his diminishing health" and his death at fifty-five.

It was Thomas B. Wilson's zeal for ornithology that brought to the Academy of Sciences in Philadelphia outstanding bird collections which would put the Academy in first place among museums. "In little more than a decade, Cassin and Wilson managed to expand the collection from the largest in America to the largest in the world." Cassin worked weekends and evenings at the Academy organizing the arriving bird collections, buying and trading skins, all the while acquiring an encyclopedic knowledge of bird genera. Elliott Coues wrote that Cassin was "the only ornithologist America ever produced who knew any considerable number of Old World birds." In a way he put plumage on the world's opinion of the Academy's position in natural science. Cassin called himself a "closet naturalist" rather than a field naturalist such as Gambel, A.L. Heermann, Richard Kern, Caleb Kennerly, and Robert Kinnicott. More pivotal was the leader in Americana museum progress, Spencer Fullerton Baird, for whom Cassin wrote "the warmest friendship I ever formed."

Three naturalists, Catesby, Audubon, and Cassin, all published works illustrating North American birds that introduced plants drawn with varying accuracy relating more or less to the habitats of the birds. This side of botanical illustration has been ignored by the historians of the subject. The botany of Catesby's *Natural History* was summarized by Robert L. Wilbur in this journal in 1990. The plant backgrounds of Audubon's plates in *Birds of America* have been occasionally mentioned, but no catalogue has been attempted. Audubon's description and color plate of *Cornus nuttalli* is unique for his having announced the new dogwood before botanists caught up.

Cassin and Audubon both employed plant artists, but Cassin's plant contributions are less significant. Suggestions for the identification of Cassin's background plates:

- Plate 1. *Salvia coccinea* [Murr.]
2. *Acer*? For the California woodpecker that stores acorns, *Quercus* would have been appropriate.
 3. "*Pblox dummondii*, a beautiful species which is a native of New Mexico and California." This indifferent drawing of *Pblox dummondii* Hook. may relate to the Santa Fe origin of seed grown by Kilvington. Reference to "California" further obscures its history.
 7. *Eschscholzia californica* [Cham.]. The wren-tit is uncharacteristically associated with poppy fields.
 9. *Opuntia* stylized.
 12. "*Nuttallia digitata* of California." Was *Callirhoe digitata* Nutt. of Texas or *Sidalcea malvaeflora* Gray of California intended?
 14. "*Microsperma bartonioides*" is *Eucnide bartonioides* Zucc.
 20. "A western species of *Ipomoea*, which was raised from seed by our esteemed friend, Mr. Robert Kilvington, of Philadelphia, to whose kindness we are indebted for the figuring of it and other plants for the plates of the present work." *Ipomoea coccinea* var. *hederifolia* (L.) Gray. Robert Kilvington (1803 – 1881), Yorkshire squire, cousin of T.B. Wilson, "well-known florist," was active in the Academy and the Pennsylvania Horticultural Society (Harshberger, *Botanists of Philadelphia* (1899), 188.
 22. "*Odontoglossum cervantesii*" [La Llave & Lexarza] — ask the orchidologist.
 23. *Spiraea douglasii* [Hook.] "of western North America."
 27. *Zauschneria californica* [Presl].
 30. "*Nemophila insignis*" is *Nemophila menziesii* Hook & Arn.
 32. "*Habrothamnus fasciculatum* of Mexico" is *Cestrum fasciculatum* Meirs.
 34. "*Abronia umbellata*" is perhaps *Abronia villosa* Wats.?
 42. "*Vernonia*, from the neighborhood of Santa Fe, New Mexico, and raised from seed by Robert Kilvington, of this city." Could this be an early introduction of Russian knapweed, *Centaurea repens* L.?
 47. "A species of *Penstemon* from Texas, raised in the horticultural establishment of Mr. Robert Kilvington, of this city." With some discrepancies, *Penstemon baccarifolius* Hook. Could this have been collected by Charles Wright "from western Texas to El Paso"? (F.W. Pennell, *Acad. Nat. Sci. Phila. Mem.* 1 (1935): 270?
 48. "A species of *Asclepias* from Texas, raised from seed by our friend Mr. Kilvington." *Acerates auriculata* Englem.?

Enjoy a handsome facsimile, enhanced with a naturalist's introduction, at an attractive ransom. Rediscover who met Audubon who met Cassin. Taste Texas. —Joseph Ewan, Missouri Botanical Garden, P.O. Box 299, St. Louis, MO 63166-0299, U.S.A.